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THE PSYCHOLOGY OF HUMOR.

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OUTLINE.

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I. INTRODUCTION.

Voltaire is said to have observed that Heaven has given us two things to counterbalance the many miseries of life,—hope and sleep. To these Immanuel Kant adds a third, laughter. No stimulus, perhaps, more mercifully and effectually breaks the surface tension of consciousness, thereby conditioning it for a new forward movement, than humor. It is the one universal remedy; a medicine for the poor, a tonic for the rich, a recreation for the fatigued, a beneficent check to the strenuous, a shield to the reformer and an entering wedge to the recluse. Barter and trade make a liberal use of it. A German writer observes that it is a parachute to the balloon of life. To change the figure, it is a switch on the railway of life preventing human collisions. It is a universal solvent to human temperaments, and like a touch of nature makes the whole world kin.

“Xenophon reckons that the man who makes an audience laugh has done a lesser service than the one who moves it to tears, but the comedian Philippos, when Socrates asked him of what he was proud, declared, ‘I believe that I ought to be proud of my right to the gift of arousing laughter, as Kallipedes, the tragedian, of his art in causing tears.’”¹ Lycurgus even erected a statue to the god of laughter.² Cicero says that “it certainly becomes the orator to excite laughter; either because mirth itself attracts favor to him by whom it is raised, or because all admire wit—but chiefly because it mitigates and relaxes gravity and severity, and often by a joke or a laugh

¹Nick, Fr.: *Narrenfeste*, Bd. I, 2. (1861.)

²Cicero: *Oratory and Orators*, p. 289.

breaks the force of offensive remarks which cannot easily be overthrown by arguments." It has remained, however, for the man of modern science and letters to indicate more specifically the problems involved in the origin and nature of humor. I need hardly state that the theories have multiplied in number and refinement to the point where their enumeration becomes tedious. It is a part of the purpose of this paper to go over the field with the hope of discovering a point of view that will resolve the seemingly diverse theories to a common basis and to restate more explicitly the psychological nature of humor.

II.

GROUPING OF THEORIES.

Groos¹ has attempted to reduce the multiplicity of humor theories to two, "that of the feeling of superiority and that of contradiction." Ribot² admits these as equally tenable, but gives some space to Hecker's "contrast and intermittence" theory as a third. I would add to these three groups a fourth, the "liberty" or freedom theory, first advanced by A. Penjon.³

It appears that Hobbes was the first to stand sponsor for the superiority theory. He expresses it as follows: "The passion of laughter is nothing else but sudden glory arising from sudden conception of some eminency in ourselves by comparison with the infirmity of others or with our own formerly." Sully,⁴ in support of the theory, points out that "we laugh at all sorts of littleness, discomfitures, unworthiness and so forth, provided that they are not serious enough to excite compassion, to offend our sense of decency or evoke other incongruous feelings." Bain⁵ observes that "the occasion of the ludicrous is the degradation of some person or interest possessing dignity in circumstances that excite no other strong emotion. . . . The element of the genuine comic is furnished by those dignities that from some circumstance or other do not command serious homage." The reader is referred to Prof. Bain's enumeration of the degradable quantities. Another means of degradation, according to Bergson,⁶ is the mechanization of organic movements, the insertion of mechanism in life processes. A ready experiment is that of stopping one's ears to the music of the

¹Groos, Karl: *Play of Man*, pp. 232-237.

²Ribot, Theodore: *Psychology of the Emotions*, pp. 352-357.

³Penjon, A.: *Le Rire et la Liberté*. *Revue Philosophique*, pp. 113-140, Aug., 1893.

⁴Sully, James: *The Human Mind*, p. 150.

⁵Bain, Alexander: *Emotions and the Will*, pp. 257-260.

⁶Bergson, Henri: *Le Rire, Essai sur la Signification du Comique*, Paris, 1904.

dance. The motions of the participants at once become ludicrous. The drill service of the army recruit, the divinity student making his maiden effort, the new clerk at the counter, the city chap trying to be "handy" on the farm, in fact the attempts of all novices are ludicrous because they convert organic into mechanical movements. Punch and Judy, jumping jacks, and all forms of punchinellos owe some of their oddity to their rigid and wooden movements.

Some of the more patent and random facts of the superiority theory are seen in the savage's laugh over a fallen foe, in the practical jokers guffaw at his victim, in the soldier's shouts of victory, in the wild uproarious shouts of the winners in many forms of political and athletic rivalry.

The theory of "contradiction" or "incongruity" has more adherents, perhaps, because the data forming the general notion is so plentiful, diversified and patent. This has led to its exploitation along seemingly different lines. Schopenhauer¹ and Kant and their commentators hold that the humorously incongruent consists in a comparison between a norm and its imperfections. For Schopenhauer the norm is a concept and the imperfection is resident in a related percept. He says: "Therefore in everything that excites laughter it must always be possible to show a conception and a particular; that is, a thing or event which certainly can be subsumed under the conception and therefore thought through it, yet in another and more predominating aspect does not belong to it at all, but is strikingly different from everything else that is thought through that conception." He thinks this is an explanation of the humor provoked by certain animal forms such as apes, kangaroos, jumping hares, etc. There is something about these creatures resembling man which leads us to subsume their forms under the conception of the human form, and starting from this we perceive their incongruity with it. Another variation of the incongruity doctrine consists in grounding the comic on a "baffled attempt" to unite incongruous parts into harmonious wholes. The baffled attempt may or may not be conscious. The conscious result is described as a "delicate, sudden surprise." Kraepelin² speaks of it as "an unexpected intellectual contrast which awakens in us a contention of æsthetic, ethical or logical feelings with a preponderance of pleasure." Dr. G. Stanley Hall³ explains wit by this sort of incongruity which he thinks functions as a

¹Schopenhauer, Arthur: *The World as Will and Idea*, Vol. II, pp. 275-280. Translated by R. B. Haldane and J. Kemp. (1819.)

²Quoted from Theodor Lipps, *Komik und Humor*, p. 29. (1898.)

³Hall and Allin: *The Psychology of Tickling, Laughing and the Comic*. *Amer. Jour. of Psy.*, Vol VIII, p. 27.

shock to the psychophysical organism. The common mind even speaks of being shocked by wits, jokers and punsters. Bain admits that the incongruous is ludicrous if it is degrading, while Spencer¹ urges its efficacy to produce laughter if it is descending but not necessarily degrading. Groos observes that these two theories (superiority and incongruity), are by no means exclusive the one of the other, but that they are only opposed in that each accuses the other of failure to cover all the facts. Sully and Ribot attempt to harmonize them on an evolutionary basis. The degradation theory explains the humor of the primitive mind,—the mind that gloried in the sudden sense of physical power and physical victory, while the modern mind finds enjoyment in incongruities, “in those fugitive and subtle contradictions which constitute the principal element of the comic to be caught on the wing.” Groos absorbs both theories in one by considering the appreciations of the comic as a form of play grounded on the instinctive indulgence of the fighting impulse, aided and enlarged by the ideas of contrast.

Ribot calls attention to the fact that the nature of laughter (the comic) would be very incompletely known were we to confine ourselves to pure psychology. Humor is a psychophysical phenomenon writ large, of which laughter is the physical aspect. The causes of physical laughter are legion, and, as Darwin² has observed, extremely complex.

Spencer was the first to consider and develop a satisfactory theory of the physiology of laughter. He points out three possible channels through which nerve centres in a state of tension may discharge themselves. One group discharges into other cortical centres which have no connection with the bodily members, a second group discharges into motor centres and thereby causes muscular contractions, a third may pass on the excitement in centres which discharge into the viscera. The channels which discharge into the motor centres may cause laughter. “Laughter, then, is a form of muscular excitement” and so illustrates the general law that feeling passing a certain pitch habitually vents itself in bodily action. The movements of laughter are without purpose and aim. They yield no product. In this respect they are similar to shivering, to certain automatisms and to some forms of imitation and play. They seem admirably fitted as spill-ways for uncontrolled energy. And herein lies the explanation of why certain classes of muscles are affected first and then certain other classes. “For an over-

¹Spencer, Herbert: *Physiology of Laughter*, *Essays Sci. Pol. and Spec.* Vol. II, pp. 452-466. (1860.)

²Darwin, Charles: *Expression of the Emotions*, pp. 352-354. (1872.)

flow of nerve force undirected by any motive will manifestly take the most habitual routes, and if these do not suffice will next overflow into the less habitual ones." The organs of speech furnish and are therefore the most frequent outlets for feeling. The muscles around the mouth are small and easy to move and are the first to contract under pleasurable emotions. The mouth movements are followed in order by those of respiration, then by those of the upper limbs, and if these latter are not sufficient, the more central and fundamental muscles of the head and body are brought into action producing the "heartly laugh." This explanation of the physical aspect of laughter has, so far as I know, been generally accepted in its main features.

In 1873, thirteen years after Spencer's paper, Ewald Hecker¹ published his unique "contrast and intermittence" theory, in which the physical aspect receives due attention. On account of its interest from an historical standpoint it is here briefly presented.

1. The vasomotor nerves which regulate the calibre of the smaller arteries can be excited reflexly by afferent impulses conveyed either from the blood vessels themselves or from the end organs of the sensory nervous system.

2. Those parts of the body rich in small blood vessels containing vasomotor nerves will experience wide volumetric changes.

3. Of such parts the brain is chief. Its delicate structure, its bony case and its large volume of blood together with other fluids make it highly important that the inflow and outflow of blood be safely regulated.

4. Such regulation is accomplished in two ways, (a) by changes in the calibre and the tonus of the blood vessels as indicated in principle 1 above, (b) by the rhythmic changes in the intra-thoracic cavity due to respiratory processes.

Hecker inferred from scattered bits of experimental evidence that tickling acts as a reflex stimulus to the vasomotor nerves, which in turn narrow the calibre and increase the tonus of the cerebral blood vessels, the result of which is to force the blood from the brain cavity, thereby inducing anæmia. It is further argued that inspiration co-operates with tickling in causing anæmia while expiration checks the blood flow from the brain, thereby restoring normal blood pressure. Any device, therefore, which prolongs expiration tends to correct the anæmic condition. For Hecker laughter is such a device; it is a biological activity developed through natural selection like any

¹Hecker, Ewald: *Physiologie und Psychologie des Lachens und des Komischen*, Berlin, 1873.

other survival-value process. The laugh is a powerful reflex movement which compensates for the diminished blood pressure caused by the tickle.

We are not sure, however, that an anæmic condition of the brain favors laughter; it is a mere inference. A case can be made out in favor of hyperæmia and laughter,¹ not to mention the fact that the presence of vasomotor nerves in the vessels of the cortex is still unproven.²

Hecker's psychical account of laughter is grounded on the physical. Laughter as a mental process consists of an accelerated contention of feeling, of a hither and thither fluctuation between the pleasant and the unpleasant in which the unpleasant aspect is neglected, that is, is unconscious. Continued contention between the two feelings produces mutual intensification until, as in the comic, "pleasure is passing over into pain and pain into pleasure." This intermittent feature of the comic is analogous to that of the physical tickle, producing a similar anæmic condition of the brain. Here again physical laughter restores the normal blood pressure by prolonging the respiratory process. The defects in this theory have been pointed out by Hoeffding³ and Lipps,⁴ by the latter at great length.

The potency of these time honored theories stubbornly to resist a Hegelian synthesis and to perpetuate the irreconcilable camps is uniquely demonstrated by Miss L. J. Martin,⁵ in her paper on the "Psychology of Æsthetics." Miss Martin presented to the view of her reagents a pictorial caricature on the phrase, "Spring, gentle Spring" by Mr. Kemble, of *Life*. They were asked among other things to assign a cause for the comic in the picture. Concerning "superiority and degradation," thirty-seven of the reagents have a feeling of superiority in connection with the Kemble picture. The remaining twenty-three report themselves as having no such feeling, while a hundred and eighteen interpret it under some variety of Schopenhauer's "contrast theory."

The sections that follow consider the "Liberty" theory and its possibilities for absorbing its predecessors.

III. HUMOROUS AND NON-HUMOROUS STIMULI.

The immensity of space, the infinitude of time, the alternation of day and night, the movements of the heavenly bodies,

¹Stewart: *Manual of Physiology*, pp. 254-255.

²American Text Book of *Physiology*, p. 204.

³Hoeffding, Harald: *Outlines of Psychology*, pp. 291-292.

⁴Lipps, Theodor: *Komik und Humor*, pp. 9-15.

⁵Martin, L. J.: *Psychology of Æsthetics*, *American Journal of Psychology*, Vol XVI, pp. 108-109.

all rhythmical changes, never inspire humor. The same thing is apparently true of all physical, chemical, and mathematical laws, and, likewise, of the macroscopic things of earth, the waters, tidal movements, cataracts, mountains and forests, deserts and plains. According to Schütze,¹ dead things, rocks, stones, rivers, are never laughable unless human qualities are ascribed to them. Bergson declares "There is no comic outside of what is properly human." Organic life in the large, such as swift, rhythmical movements of large numbers of animals, may inspire awe and dread but never humor. The orderly expression of life processes, such as the heart beat, the mystery of sleep, self-consciousness, birth and death, give no sense of humor. There is a large group of objects, situations and actions which incite feelings of disgust, of loathing and even hatred. Of objects there may be mentioned parasites, creeping, crawling and slimy things, all filth, all skin and eye diseases; and of actions, all forms of tyranny and bullying, treachery, poltroonery, ingratitude and, according to Bain, the "entire catalogue of the vanities given by Solomon."

There are a large number of objects which, so far as humor is concerned, constitute an indifferent zone. Subdued colors, gray tones, all natural forms of locomotion and movements, all common and customary occupations, all actions and events of familiar notice belong here.

By this process of elimination it appears that the conditions averse to humor are, (1) the macroscopic things of the world together with their laws, order, harmony, and rhythm, (2) those things which are inimical to life and freedom, (3) those things, largely of the social order, that have become habitual, regular in occurrence and necessary to human comfort. There are left for consideration animals and their actions, man and his actions, clothes, customs, manners, words, language and thoughts.

1. *Animals.* Small animals, like small people, are more likely to provoke humor than large ones. The bantams and games are the clowns and Don Quixotes of poultrydom, while the Plymouth Rocks and Shanghais are the prosaic members. The poodles, terriers and spaniels are the fun makers of the kennel, the St. Bernards, great Danes and bull dogs command our serious respect and sometimes more. When an animal of one class does the task common to an animal of quite a different class, it is apt to provoke humor. An ox in shafts drawing a top buggy; mules, asses or buffaloes running a race; an elephant drawing a chariot are examples. But if the animal is set

¹Schütze, Stephen: Versuch einer Theorie des Komischen, p. 36, 1817.

to doing a human task the humor is intensified. The inimitable Æsop, endowing animals with human craft and qualities, made this style of humor classical for all time. It appears in modern humor in the doings of Johnny Bear, in the clever tricks of Brer Rabbit and Brer Fox, and in the county fairs, charity balls, political conventions, clinics for appendicitis and the like conducted by divers species humanly socialized.

2. *Man.* Man may provoke humor by his size, especially if extremes meet. The undersized is likely to amuse, especially in his pretensions and passions. Unusual features, types of ugliness, odd shapes, and Falstaffian proportions contain humorous elements.

3. *Actions.* Mimicry and all actions of a pretentious and useless sort, and in false time and space relations may provoke humor. All mimicry is humorous, whether in the form of the puppet show, the pantomime, the burlesque or the comedy. The pursuit of uncertain pleasures,¹ idle, and sometimes serious, gallantry, premature and rustic courting readily classify with humorous actions. Useless actions of the ideomotor and absent minded type are the causes of many of the comedies of errors in every day life.² Examples are numerous: A young lady partially disrobed to make a toilet at the noon hour and wound up by "saying her prayers," that being her usual next step in the evening. We recall also the well-known anecdote of Newton, who carefully put his watch in the kettle, and resumed his mathematical labors with the egg on the table beside him to indicate the time. The wrong use of objects, tools and machinery often make an act humorous, for instance, an Indian purchasing a hearse for a carriage and taking his family to church in it. Awkwardness is a common type of action naturally humorous. Any action inherently serious may become humorous by occurring either out of time or out of place. Singing ahead of time, applauding alone, answering questions at the wrong time on formal occasions, an unmindful deacon removing his small coat with his overcoat and sitting down in his shirt sleeves in church, are cases in point. Hazlitt remarks, "in jocular history everybody is at angles to real life; people do precisely what they ought not to do, say what they ought not to say, are found where they ought not to be found."³

4. *Clothes.* Clowns and professional fools supplement their wit, humor and mimicry by their well-known forms of dress. Johnny Bull, Uncle Sam, Santa Claus are always good-na-

¹ Hazlitt, William: English Comic Writers, p. 14. 1819.

² Jastrow, Joseph: On Lapses of Consciousness, Pop. Sci. Mo., Oct., 1905.

³ Hazlitt, W. C.: Studies in Jocular Literature, pp. 221-222.

turedly received, partly on account of their dress. Halloween, masked balls, Mardi Gras and carnivals, ancient and modern, owe much of their charming good humor to dress. It is well known that we laugh at the dress of foreigners and they at ours. "Three chimney sweeps meeting three Chinese in Lincoln's-Inn-Fields, laughed at one another till they were ready to drop down. Country people laugh at a person because they never saw him before. Any one dressed in the height of fashion or quite out of it is equally an object of ridicule." Doubtless if the centuries could rise up and view each other *en masse*, their first act would be mutual laughter at each other's clothes.

5. *Customs and Manners.* As stimulants of humor customs and manners have, perhaps, no equal. They excite it alike in the vulgar and in the cultured, in the illiterate and the learned. They appear in excesses and exaggerations and in violating time and space relations, either as innovations or as lingering too long. To appear in excess or out of time and place implies some age and stability in human institutions. Norms and standards of fashions must be formed, regularity in activities must freeze into custom and the free spirit of good fellowship and of social intercourse must become habituated to the plane of manners before the spirit of satire, wit and humor can react for or against them. This is so apparent in the literature of every people that it seems unnecessary to make special references.

6. *Words, Language and Thought.* This is the favorite tramping ground for both the humorist and his critics. Here occur the most delicate, subtle and refined specimens. It is also here that an attempt to give an adequate treatment resembles trying to bottle a fog or lasso a cloud. To make some headway, however, we are under the necessity of drawing a few distinctions. All words, language and thoughts not humorous to the speaker but so interpreted by the observer may be termed *unconscious humor* (following the lead of common usage). The humorous interpretation of unconscious humor may be called *passive humor*. All deliberate use of words, language and thoughts and the exploitation of all other humorous stimuli by the subject for humorous effects may be considered *active humor*. In what follows the text indicates which sort is meant.¹

a. Concerning words it appears that their misspelling, mispronunciation, misinterpretation, forced and misuse, punning, repetition, localisms, foreign accent and even intonation

¹ For a discussion of the forms of the comic, see Lipps: *Komik und Humor*, pp. 78-102.

endow them with a certain degree of humor. Many of the humorous classics use one or more of these methods. The writings of "Artemus Ward" and "Josh Billings" practically exhaust the possibilities of misspelling. All forms of dialect now occupy much of the humorous field of mispronunciation and misinterpretation. Dickens displays the worth of forced usage in the inimitable *Pickwick*. Sheridan creates Mrs. Malaprop largely by these methods. Shakespeare had the courage to pun to his own satisfaction. Dickens again has used repetition to a fine effect in several of his characters. We recall Mr. Toots, "of no consequence" and Joey Bagstock who is "devilishly sly." Provincialisms and foreign accents enter into the humor of daily life more than into that of literature. The unconscious distortion of words by the illiterate, the naïve and the pretentious adds to the quality of this sort of humor. In fact, whether the distortions are "made" or are unconscious, their humor depends on our apprehending them as unconscious. A farmer who made daily business trips to Richmond assured his neighbor that he always dined at a "first-class reservoir." A colored servant in my own home asked for a half holiday to go on a "railroad 'squashin.'" (What irony in the light of recent events !)

b. Language, much more than customs and manners, requires a civilization of some age and stability in order to furnish both the conditions and the material for humor. George Meredith¹ has urged that a society of cultivated men and women is required wherein ideas are current and of some duration, and the perceptions quick that the humorist may be supplied with matter and an audience. "The semi-barbarism of merely giddy communities, and feverish emotional periods" create no humor. Quaintness in language, as in other things, gives a tinge of humor. A description of the table manners of a nun or of a lady of culture in modern language would be sorry business, but when Chaucer says of the nun,

"At mete wel y-taught was she with alle;
She leet no morsel from her lippes falle,
Ne wette hir fingres in hir sauce depe."

he stimulates our sense of humor. Here belongs the grave and serious style in connection with trivial and prosaic matters. Many of the failures of language to fit the thought yield humor, a common type is verbosity. In this connection I may cite the following, which is supposed to come from the Mt. Sterling, Ky., *Reporter* (Colored) :

Dear Editor :

Please allow me a space in your momentous Gazette to reciprocate

¹ Meredith, George : *An Essay on Comedy*, p. 8, London, 1905.

my gratitude to the indefatigably workers of the Evergreen Baptist Church. While sitting in my studio last Friday evening greatly absorbed in the momentous problem so called Negro problem I were interrupted by the anthem "There shall be showers of blessing" which rendered me surprisal happy. . . . After a general parlance I were divinely impressed to descant on the altronistic spirit that should characterize the christiandom. A sumptuous repast followed and all present shiated their gastronomic desire. Bro. Ben Mitchell distinguished himself from the rest by his implacable voracity. May God bless the members of the Evergreen Baptist church. Many thanks. *F—— B——, Pastor.*

Ultra slang, brusque catch words and phrases of common life may provoke humor for a short period. This field is illustrated by the monologues of Chimmie Fadden and the writings of George Ade. The speech of the excited, the irritated and the fatigued is often rendered humorous by inversion, omissions and awkward substitutions. A prospective bridegroom at the church door in consultation with his minister inquires excitedly, "Is it kistomary to cuss the bride?" Grumio answers his master, "Ah, sir, they be ready; the oats have eaten the horses." *Taming of the Shrew, Act III, sc. 2.*

c. What a man thinks or feels, although serious to him, may be just as much an object of humor as a situation, an awkward movement or a form of speech. The unconscious maker of humor in thought is my next neighbor. More specifically it is the illiterate, the ignorant, the inexperienced, the credulous, the skeptic, the superstitious, the over-serious, the vain and the prosaic. The humor usually appears in the attempt to deal with situations and problems somewhat beyond their ken. The ignorant and illiterate amuse by their literalisms, pretensions, evasions and superstitions. Dickens makes frequent use of this form of humor, witness Joe Gargery's pretensions at reading for Pip's benefit. Thackeray's Captain Rawdon Crawley is a fine specimen of stupid ignorance. Many superstitions are kept alive by their humorous vein.¹ Inexperience is the lot of childhood and its humor is expressed in its questions, in its wonderings and its explanations. This is abundantly verified in the literature of childhood, now occupying excessive space in current magazines. The humor of the credulous appears in a condensed form in their responses to the yarn-spinner and prank-player. The faith and works of the inventor are often ahead of his time and are therefore the butt of the common mind. Cervantes made Don Quixote the prince for all time of the over-serious, and Malvolio of Twelfth Night typifies the vain among individuals of small parts. Delivering great force into small matters, exercising

¹ Johnson, Clifton: *Some New England Superstitions*: New Eng. Mag., Oct., 1906.

much thought over petty questions, exalting trifles to the plane of the magnificent form a perennial source of humor.

Active-thought humor. Active-thought humor is as complex and infinite in variety as thought itself. Its consideration naturally belongs with that given to the *nature* of humor in the next section. It is taken up here for the reason that it employs a wider range of humorous stimuli than that just detailed. Perhaps the earliest form of this humor is expressed by the child in its "surprise" and peek-a-boo plays. While learning to talk it uses mimicry to good effect and a little later imitative and even original tricks are performed for amusement. From about four years old to ten original humorous drawings are made with considerable zest. As soon as they acquire some degree of familiarity with the mother tongue, guessing games, riddles, conundrums old and new, rhyming, punning and joke-making are used with greater or less frequency for humorous purposes. This period naturally connects with the drollery, clownishness and prank-playing of adolescence—a period rather barren in creative humor. Adolescence laughs much but creates no humor, so far as I can ascertain. The gravity of life is dawning and self-consciousness is too frequently on guard, thereby precluding the conditions for creating humor. Cicero¹ was the first to have extensively considered active-thought humor in adult life. He apologizes for his number of headings. "I have divided these matters into too many headings already—but in general their varieties are reducible under a few general heads; for it is by deceiving expectation, by satirizing the tempers of others, by playing humorously upon our own, by comparing a thing with something worse, by dissembling, by uttering apparent absurdities and by reproving folly that laughter is excited." Elsewhere he includes "pretended misunderstandings, wishing the impossible, uniting discordant particulars, and concealed suspicion of ridicule." Of course it is evident that the wit and the humorist employ these several means together with those I have already described, while the cartoonist adapts the same principles to the pen and brush.

IV.

THE NATURE AND ORIGIN OF HUMOR AS A MENTAL PROCESS.

Schütze in 1817 and Hazlitt in 1819 *résumé*d the various opinions as to the nature of humor up to their time. The former cites some fifteen different authorities and views.

¹ Cicero: *Oratory and Orators*, Bonn's ed., p. 303.

Schopenhauer in 1819 made a decided contribution in that he attempted an exact description of the mental processes involved. Since then the nature of the mental process and its physiological basis have been the main points of discussion. Schütze, Hoeffding and Sully call attention to the sense of freedom involved. Penjon in 1893 describes at some length the relation of this sense to humor.

I have already pointed out that the appreciation of law, of order, of harmony and of those things that are inimical to life and freedom begets a sober mental attitude, the intensity of which varies with the weightiness of the matter and the issues involved. Now if when dealing with such matters, the thinking process continues organized and controlled and progresses toward an end, it is termed rational. But if the mental tension exceeds the capacity for controlled thinking, brought on by the sudden triumph of wrong and evil values, disruption of the thinking process at once ensues accompanied by an unpleasant emotion ranging from mild disappointment to the tragic; if, on the contrary, the disruption is caused by the sudden triumph of good values, a pleasant emotion results. In either case organized and rational processes give way to those of an uncontrolled and emotional sort. The mental stream has had its banks torn away and its forward movement stopped, voluntary movements are replaced by hereditary. In the more intense form a reversion to primitive conditions may occur; for we then do and say things that may shame us in our sober moments. Now the humorous process occurs in just such a disrupted consciousness at the triumph of good and pleasurable values preceded by a mental tension similar to, but not always equal to, that preceding emotions. The common and quiet forms of humor usually occur in a consciousness that has been running at its usual strength and depth, sufficiently organized to command the situation, assume a definite form and take on a certain strength of surface tension. (The term, "surface tension," simply extends the water metaphors of psychology in a logical direction. I use it to indicate the impervious condition of consciousness formed in any attentive state, the strength of the surface tension being in direct proportion to the intensity of attention.) The function of the humorous stimulus consists in cutting the surface tension, in taking the hide off of consciousness as it were and in breaking up, in part only, its organization, which is at once followed by the humorous feeling, the next wave in the stream of consciousness. The cognitive elements in the humor process consists, (1) of the perception of the stimulus, (2) the sense of freedom. Each of these cognitive elements is suffused by pleasant affective elements which constitute in their totality the unique and dominant humor tone. The unique-

ness of the humor tone is the crux of the matter. The mental tension preceding the humor process is not the differentia, for that precedes any and all emotional states, yet it is an essential condition. The clue lies in the nature of the humor stimulus and the relation sustained to it by the individual. This stimulus belongs to an order of knowledge, whose laws, uniformities, manners and customs have arisen since the human mind has attained its present estate. Contrast with the humorous stimuli the non-humorous and it appears, humanly speaking, that the latter have always existed. The heavens, the laws of matter, cosmic forces of whatever sort were in full swing when human consciousness dawned, their operation has participated in mental evolution and to that extent has impressed law and order upon it. Therefore, when we are engaged with these things, sober thinking, pleasant or unpleasant emotions are the outcome, but never humor. "The spirit of mind in infancy may be through and through playful, but as it unfolds and develops in a world of order and law, it comes to operate in an orderly fashion. We see nature in terms of law and order, that is in terms of science."¹ But it will be noticed that the humorous stimuli are departures, exaggerations, even violations of the laws, uniformities, concepts and what not that have evolved out of man's experience. The significant fact for humor is that these departures, exaggerations, etc., do not disturb the recognized values of good and evil. The mind maintains all the while a disinterested attitude toward the object of its activity. We seek neither to correct nor further exaggerate the departure from the norm. It is time to feel and not to act. We enter into æsthetic rather than practical relations with the object of our humor; should we seek the practical the humor at once ceases, issuing, perhaps, in bitterness or joy, sarcasm or flattery, indignation or admiration.² Penjon writing upon this point says: "If one separates, as must be done, the causes which too easily deform the comic and make of it an emotion of wickedness or bitterness, the comic emotion will appear purely disinterested. I mean by this that the object or the event which is the occasion of the comic excludes every idea of loss or of profit, that it makes us conceive neither hope nor fear and seems to us at the same time neither advantageous nor harmful to any one; it is worth in itself what it is worth without adding to our idea of it any consideration of end or ideal." The humorous process, then, like play, is its own end and justification. The kinship be-

¹Penjon, A.: *Ibid.*, p. 117.

²For subjective proof of this read "Polly Baker's Defense" by Benjamin Franklin, also Dickens's Satire on American life in Martin Chuzzlewit.

tween humor and play not only suggests relationships between humor and freedom, which Penjon¹ has so well worked out, and between humor and æsthetics long ago indicated by Kant and recently treated by Lipps, but that mental activities long interpreted as play should be credited to humor. I have already indicated the survival-value of humor for superstition ; it doubtless performs a similar and larger function for play. It is suggested that a number of the so called plays of the higher mental processes named by Groos² are by nature humorous, the humor being expressed in forms of play. Humor, then, is an end in itself and has no practical interest in its object. *This fact constitutes its first differentia.*

I have already indicated that the sense of freedom is a constituent element in the humor process. Its consideration is next in order. To that end I submit some of the evidence as it had formed in my own mind before meeting with Penjon's extended account.

The family and guests are seated about the fireside enjoying the moments of silence. The only light is that of the glowing embers. A smouldering bit of bark suddenly flashes up and a smile plays over the faces of the silent group. The stroke of a sweet-toned clock or a sneeze or the dropping and rolling of a sewing thimble or of a ball of yarn produce under similar conditions the same effect. A group of boys are seated on the bank of a bathing pond apparently gazing at the water's glassy surface. Suddenly it is broken by huge drops of rain out of an apparently cloudless sky. The boys smile. The humor response in such cases is weak and simple. At such times consciousness is damped down to dreamy, pleasant processes under lax attention, and the mild humor results from the sudden, delicate, harmless stimulus piercing its surface tension, disrupting its feeble structure and thereby permitting it to move on in a more free and spontaneous fashion. But let the surface tension and structure of consciousness become toughened, cramped and tense by responding to routine or grave or hard conditions, and objects of little or no inherent humor will become excruciatingly humorous. "Snickerin' at nothin'" in the school room, giggling before strangers and company, especially at the table, the increasing intensity of annoying return waves of humor on solemn occasions are cases in point. Bain observes that in a court of justice or in an assembly of ordinary gravity a trifling incident causes laughter, and that the young are the greatest sufferers by the imposition of gravity and are the most disposed to break free from it. They entertain a mock solemnity for the intense delight of rebounding

¹Penjon : *Ibid.*, p. 116.

²Groos, Karl : *Ibid.*, pp. 122-169.

from it, just as they toil up to the top of an eminence for the sake of the downward run. Members of college glee clubs inform me that they see humor in everything while on their vacation musical tours. Darwin records that the German soldiers before the siege of Paris, after strong excitement from exposure to extreme danger, were particularly apt to burst into laughter at the smallest joke. I have received testimony from eye witnesses of the San Francisco earthquake to the effect that for several days following the shock not only laughter but good nature and humor overflowed on slight provocation. The history of humorous literature discloses the fact that it is most prolific in those crises and changes in human affairs at which the consciousness of freedom breaks out. Martin¹ tells us that the parody was first introduced during the performance of Greek tragedies to relieve the audience from the intense mental strain. In the severe atmosphere of the king's court the court fool was an important adjunct. In reality his was the freest personality of the group, the king not excepted. King Lear and his fool furnish a most striking example in literature.

These considerations indicate an intimate kinship between the humor process and the sense of freedom. The real connection becomes apparent when the nature of the stimulus is taken into account. It has already been shown that the stimulus perverts and breaks up the mechanism and order about us. It appears as the only objective fact in our experience that dares to defy the world order with impunity, that can violate ruthlessly, without pain and without apology, the manifold human contrivances, social customs and relationships and thereby not only creates the sense of freedom, but also assures us that we may temporarily escape from the uniformities and mechanisms of life. The sense of freedom, once born through these temporary escapes from uniformity, has been objectified into the so-called principle of freedom. Any means that will lift the veil of law and social order and reveal freedom as an abiding reality, will produce pleasure. Play, art and the humor stimulus are such means. Play performs this function especially for the young, art for the trained and educated, but humor ministers impartially to all ages and classes. By its revelation of freedom, abundance of life, springs of spontaneity and possibilities of progress are made more manifest. So long as the present order of things is taken for granted, so long as present ways and laws are accepted as the only ways and laws, change and progress if any is accidental. The humor stimulus rends the veil of uniformities and bids us look behind the scene where

¹ Martin, A. S.: Parody, p. I.

luck, chance, spontaneity and life operate. It is the uncertainties and not the certainties of life that give it zest and charm. Let the outcome of a game or contest become a "dead sure thing" and interest will flee away. We are rather chary of an over-scientific game in which luck and chance are supplanted by rigid rules. The humor stimulus gives glimpses of the world of uncertainties, of spontaneities and of life, and in so doing creates the sense of freedom of which the sense of humor is the obverse side. The sense of freedom is the second differentia, therefore, of humor.

The failure to see that the sense of freedom is a constituent part of the sense of humor is doubtless responsible for the "superiority" and "degradation" theories. The sense of power yields pleasure but not humor. The sense of power is wrapt up with obligations, practical interests and relationships, the humor stimulus does not make us aware of power. Incongruity, descending or otherwise, all disorders of time and space relations in our actions, customs and language, all mechanized living movements, all deliberate manipulation of the humor stimuli are only humorous when they excite the sense of freedom. If there is any genuine humor in the shouts of the victor, it is due to the sudden sense of freedom arising from the removal of the obstructions to victory. It would then appear that the multiplicity of humor theories may be resolved into the freedom theory. The theories hitherto advanced have been more a classification of humorous stimuli than explanations of humor as a mental process.

Origin. A cross section of our mental life shows first an aspect composed of hereditary factors (unlearned reactions), second a well defined aspect of acquired factors (learned reactions) composed of what the individual does for himself and what is done for him, and third an ill defined aspect that permeates the other two and in addition enjoys in part a separate existence of its own made up of unmechanized and elementary mental factors. One readily recognizes the second aspect as intelligence. Prof. Royce¹ calls it "docility." It may be termed mechanized mind in that it represents mind reduced to law and habit. Getting on in the world is dependent to a degree on a certain quantum of mechanized mind. Common usage employs such terms as habit, adjustment, adaptation, education, to designate such an equipment. Several processes are involved in its production, such as imitation, learning by "trial and error" and by "understanding." Of these methods those that make the most use of voluntary attention are the quickest in results and the most extravagant with mental en-

¹ Royce, Josiah: Outlines of Psychology, p. 38.

ergy; here it is that mental tension reaches its highest pitch. Relief comes in a variety of well known ways, humor, perhaps, being the most unique of the lot from the fact that it accomplishes its purpose with the least expenditure of energy and at a time, too, when the individual can ill afford to make sacrifices in the interest of recreation. Considering, then, the nature of humor as a mental process, and the nature of its stimulus, together with the conditions under which it appears, it seems highly probable that it emerged as a distinctive process from the states of *inattentive freedom* immediately preceded by states of *necessary attention*. It should be mentioned in this connection, that even with the sense of humor as a part of our conscious mechanism, its operation is decidedly influenced by the composition and organization of consciousness as affected by preoccupation, mood, temperament, beliefs and ideals. Miss Martin invaded this subtle field with experimental methods and came out with results well worthy of record.¹

V.

FUNCTIONS OF HUMOR.

The psychical function of humor is to delicately cut the surface tension of consciousness and to increase the pliancy of its structure to the end that it may proceed on a new and strengthened basis. It "spells" the mind on an up-hill pull. Perhaps its largest function is to detach us from our world of good and evil, of loss and gain and enable us to see it in proper perspective. It frees us from vanity on the one hand and from pessimism on the other by keeping us larger than what we do and greater than what can happen to us.

The physiological function appears to be common knowledge, for certainly its supposed influence on adipose tissue has passed into a proverb. Kant cherished the belief that laughter had a beneficent effect on our digestive organs even down to our very entrails. Hecker advocates the idea that it relieves the anæmia of the brain induced by tickling.

Its biological function, in my judgment, is far more unique in mental economy than is its nature as a process. I have already called attention to the unmechanized aspect of mind, a matter more readily believed than easily proven. To adduce adequate evidence of the magnitude and the importance of this aspect of mind over the mechanized and hereditary portions would lead us too far afield. For the sake of a better appreciation of our problem, however, a few considerations on the point seem worth while. First, we register our belief in its existence by such expressions as mind growth, naïveté, self-activity, spon-

¹ Martin, L. J.: *Ibid.*, p. 64.

taneity, individual variation, genius and "mental initiative" (introduced by Prof. Royce), and by more remote terms like open mind, simple mind, youthful mind, unprejudiced mind. Second, many students of mind express themselves to the same effect. President G. Stanley Hall states that surely mind is as old as the body and certainly more complex: any lesser conception would indeed be a mean one. Prof. Shaler¹ expresses this view so clearly that I quote his words: "One of the results of the marvellously swift, absolutely free development of man's spirit is that there has as yet been insufficient time for it to become organized as are the conditions of the body, working in the instinctive manner in which the lower species do their complicated work through the fore-determined mental processes we term instincts. There are always gauges and standards for the endeavors in the mind as there are in the bodily frame. With us, however, all kinds of thinking are still a hurly-burly, a confusion, to which time and culture may possibly bring something like the order it has in the lower life, but which probably is as ever to remain in its present uncontrolled state." Third, biologists are generally agreed that the hand, the vocal organs and the cerebral cortex have undeveloped capacities far beyond present realization. Their possibilities are as yet unknown, and with the cortex its capacity appears to be infinite with only a small portion reduced to law and order. If we can so confidently assert unlimited capacity of these physical structures, then any lesser conception of mind is indeed an untenable one. It does not yet appear what we shall be, but there is general agreement that the immediate path of evolution will be spiritual rather than physical. And if spiritual, it must be confined to the free portion of mind, to those parts not yet close yoked to matter and frozen into habit. Of course there is universal consent that the mind should be mechanized to the extent of the needs of common life, of routine business, of the alphabets of learning and of the elements of culture, but anything beyond these points is inimical to both individual development and to racial evolution. Influences that tend to check mechanization and to incline the mind to grapple with the new and with the ideal prolong the possibilities of spiritual development. Humor and play are two such processes, with the honors in favor of humor. It stands guard at the dividing line between free and mechanized mind, to check mechanization and to preserve and fan the sparks of genius. And, like play, it keeps the individual young, projects the best in youth into adult life, sets metes and bounds to "do-

¹Shaler, N. S.: The Measure of Greatness, *Atlantic Monthly*, Dec., 1906, p. 751.

cility" and prevents the mental life of the race from hardening into instinctive and hereditary forces.

Humor is *par excellence* a social mental process, a distinctive feature of the social consciousness. It is, therefore, not completely described until that aspect is taken into account. Then, too, its bearing on creative art and the uses made of it in our social, political, commercial and industrial life call for more detailed attention than this paper can undertake.

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